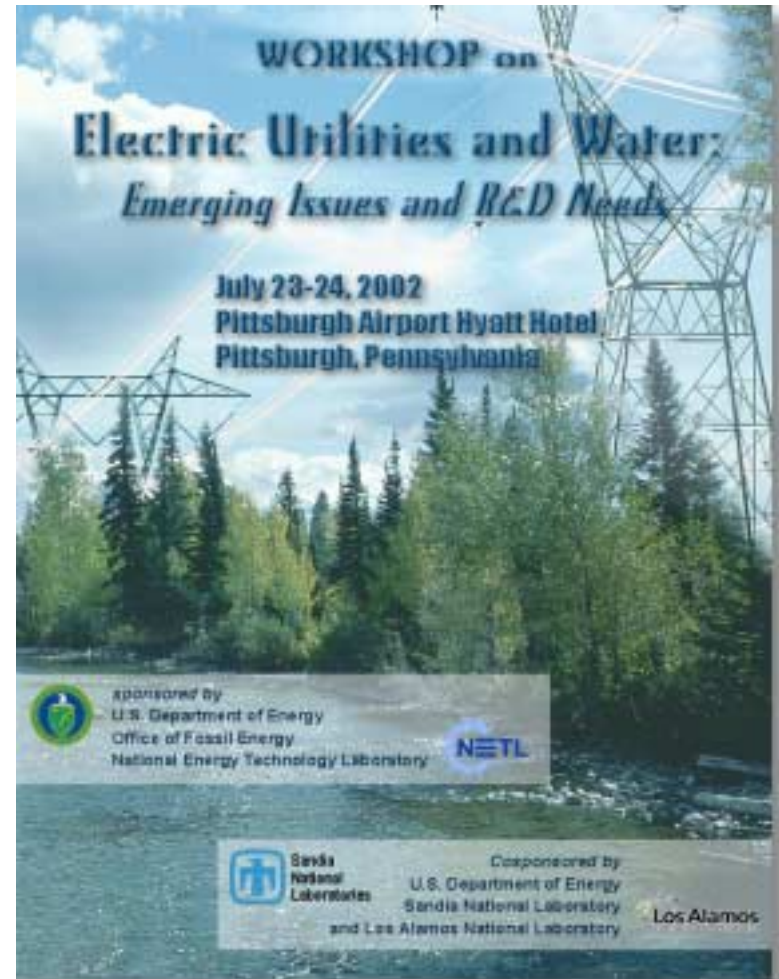
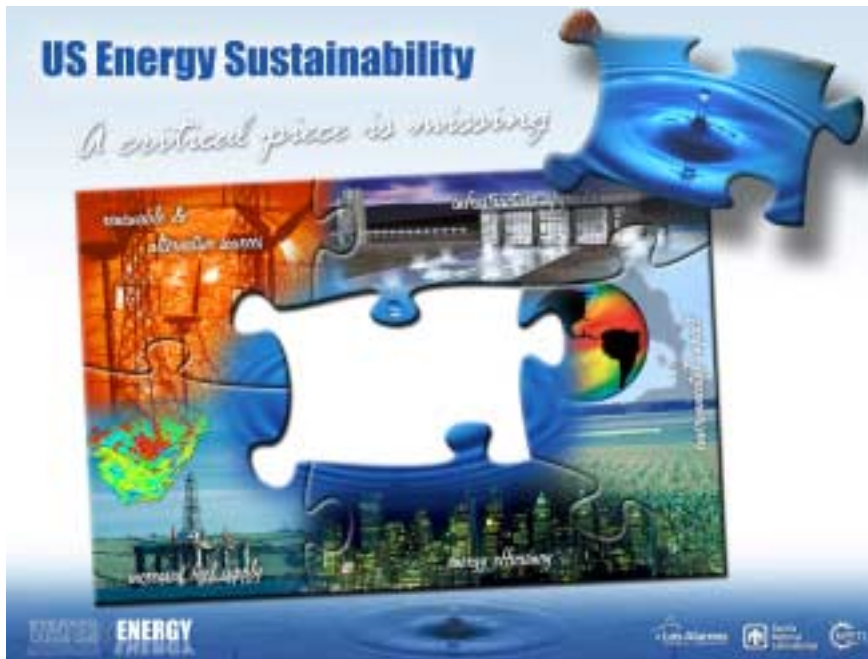


Workshop on Electric Utilities and Water: *Emerging Issues and R&D Needs*

Good Morning
and Welcome!



National Laboratory Collaboration



- Department of Energy's National Energy Technology Laboratory (NETL), Los Alamos National Laboratory (LANL), and Sandia National Laboratory (SNL) are working together to develop an integrated water-energy RD&D program

Electric Utilities and Water Workshop

Objectives

- **Provide a forum for discussion of current and future water issues impacting electricity generation**
- **Provide insights into the depth and breath of these issues**
- **Identify key technical and scientific RD&D needs and opportunities for industry-government partnerships**



Water-Energy Research Initiative

- **Recognize need to better understand and manage link between water and electricity production**
- **Develop research plan to address water use and quality issues, e.g.**
 - Cooling, treatment, sensor technology
 - Climate change implications
 - Watershed management
- **Build partnerships with industry, Federal agencies, and other key stakeholders**



Electric Utilities and Water Workshop

Agenda



- **Day 1**
 - Presentations and Q&As
 - Breakout sessions
- **Day 2**
 - Presentations and Q&As
 - Reports from breakouts
 - NETL's R&D plans

Housekeeping

- **Breaks**
- **Lunch**
- **Facilities**



Day 2 - July 24, 2002



Power Plant Water Issues

Planned Activities



- **Competitive procurement to be issued in late FY02:**
 - Non-traditional sources of process and cooling water
 - Wet- and dry-cooling technology
 - Cooling water intake / outflow structures
 - Process and wastewater treatment and / or reuse
 - Advanced sensors and controls
 - Zebra mussel control

Adjourn

“When the well is dry we know the worth of water”

-Benjamin Franklin

